

AGM (Absorbed Glass Mat) BATTERIES IN HEAVY-DUTY TRUCK APPLICATIONS

Q: How is AGM (Absorbed Glass Mat) different from a flooded design?

A: Unlike a “flooded” lead-acid battery, an AGM battery does not have free-flowing electrolyte. Separators made of mostly fine glass fibers hold the electrolyte like a partially saturated sponge.

AGM batteries are Valve Regulated Lead-Acid (VRLA) batteries that recombine the hydrogen and oxygen created during charge and discharge, back into water. This recombination keeps the battery water levels within proper limits. For this process to work, VRLA batteries must be charged at specific voltages.

Each cell contains its own valve. If the battery is overcharged, gas pressure builds within the cell rapidly. If the pressure exceeds one and a half PSI, the valve(s) will open and let the gas escape, thus the term “Valve Regulated”. If this continues, the battery will dry out and fail much like an overcharged flooded battery.

Q: Why use an AGM (Absorbed Glass Mat) battery in a commercial truck or other heavy-duty application?

A: AGM batteries offer superior starting power, high reserve capacity, and long lasting life. The advanced AGM technology and dual-purpose design makes East Penn's AGM battery excellent for quick starts and for powering accessories and creature comfort items when your engine isn't running. An East Penn AGM battery is also excellent for battery powered HVAC systems. The group 31 AGM battery has the same case/cover configuration as a traditional group 31 battery, which allows it to be used as an original equipment battery or as a drop in replacement.

Q: What types of heavy-duty applications use AGM (Absorbed Glass Mat) batteries?

A: AGM batteries can be used in several applications including truck starting, dual-purpose, and deep cycle applications. Similar to flooded, AGM batteries have different designs ideal for specific applications.

AGM Starting batteries are designed for larger engines that need high cranking power like dump trucks and loggers.

AGM Dual Purpose batteries are designed for starting and dual-purpose applications such as day cab, sleeper cab, and pickup and delivery.

AGM Deep Cycle batteries are a dual-purpose/deep cycle version designed for applications where the battery is the power source such as a battery-powered HVAC system.

Q: Can I mix AGM (Absorbed Glass Mat) and Flooded batteries within the same battery pack?

A: No, you cannot mix AGM and flooded batteries within the same battery pack. AGM batteries should be paired together with AGM batteries of similar age and ratings within the same battery pack.